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AN ELECTRONIC DISPLAY MEDIUM

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(57) Claim

1. An electronic diaply medium comprising a central control unit and a plurality of remote display devices, each said remote display device adaptable to display information which is stored in said device according to a pre-programmed instruction, wherein said central control unit provides control signals to alter the program and/or said stored information wherein said signals are passed along a telecommunication system.

FORM 1 SPRUSON & FERGUSON

COMMONWEALTH OF AUSTRALIA

PATENTS ACT 1952

APPLICATION FOR A STANDARD PATENT

Michael Leearle Yokom, of 92 St George Crescent, Sandy Point, New South Wales, 2171, AUSTRALIA; Stephen John Lomans, of 69 St George Crescent, Sandy Point, New South Wales, 2171, AUSTRALIA, hereby apply for the grant of a standard patent for an invention entitled:

An Electronic Display Medium

which is described in the accompanying provisional specification.

The address for service is:-

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Patent Attorneys
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31 Market Street
Sydney New South Wales Australia

DATED this TWENTY FIFTH day of JANUARY 1989

Michael Leearle Yokom, Stephen John Lomans

By: M.J. Anderson

Registered Patent Attorney

TO: THE COMMISSIONER OF PATENTS
OUR REF: 84649
S&F CODE: 16730

5805/2

COMMONWEALTH OF AUSTRALIA

PATENTS ACT 1952

DECLARATION IN SUPPORT OF AN

APPLICATION FOR PATENT

In support of the application made by Michael Leearle Yokom, Stephen John Lomans for a patent for an invention entitled:

An Electronic Diary Machine

We, Michael Leearle Yokom, of 92 St George Crescent, Sandy Point, New South Wales, 2171, AUSTRALIA; Stephen John Lomans, of 59 St George Crescent, Sandy Point, New South Wales, 2171, AUSTRALIA, do solemnly and sincerely declare as follows:-

1. We are the applicants for the patent.
2. We are the actual inventors of the invention.

DECLARED at SANDY PT this SIXTH day of FEBRUARY 1989

.....
Signature
Stephen John Lomans

.....
Signature.
Michael Leearle Yokom

TO: THE COMMISSIONER OF PATENTS
S&F REF: 84649
5880/2

FOR 10

S & F Ref: 84649

FORM 10

COMMONWEALTH OF AUSTRALIA

PATENTS ACT 1952

COMPLETE SPECIFICATION

(ORIGINAL)

This document contains the amendments allowed under Section 83(2) by the Supervising Examiner on

... .

and is correct for printing

: : ....

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Name and Address of Applicant:

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Complete Specification for the invention entitled:

An Electronic Display Medium

The following statement is a full description of this invention, including the best method of performing it known to me/us

5815/2

F OF RECEIPT

ABSTRACT

An electronic display medium including a central control unit and a plurality of remote display devices. The remote display devices display information (advertising, public notices, news, exchange rates, schedules, current events, etc) which have been stored in the devices according to a preprogrammed instruction and/or provided by the central control unit. the central control unit sends signals to the display devices to alter the programmed instructions and/or said storage information over a telecommunication system.

The present invention relates to electronic display media, and in particular, to an electronic display medium which displays information at remote locations and which can be controlled from a central location.

There are many known methods of displaying information such as advertising and the like, which use electronic display units. Such display units can be remotely controlled by a short circuit television arrangement or can have continuous information display contained thereon. Such display units are suitable for certain purposes, however, it is envisaged that a display medium can be used to provide information using electronic displays and which also updates and transfers information to remote controlled installed devices via telecommunication systems.

It is an object of the present invention to provide an electronic display medium which displays information using electronic displays at remotely installed devices with control messages being provided via telecommunication.

According to one aspect of the present invention there is disclosed an electronic display medium comprising a central control unit and a plurality of remote display devices, each said remote display device adaptable to display information which is stored in said device according to a pre-programmed instruction, wherein said central control unit provides control signals to alter the program and/or said stored information wherein said control signals are passed via a telecommunication system.

One embodiment of the present invention will now be described with reference to the drawings in which:

Fig. 1 is a block diagram of an electronic display medium according to a present invention, and

Fig. 2 is a block diagram of a display device which is used in the medium of Fig. 1.

The display medium 1 illustrated in the drawings comprises a central control unit 2 and a plurality of remote display devices 3 which are controlled by the central control unit 2 by a telecommunication system.

The central control unit 2 comprises a main computer 11 which provides signals to a secondary computer 12 associated with a transmitter 13. The transmitter 13 is able to send control signals to receivers 7 associated with each of the remote display devices 3.

The remote display unit 3 as illustrated in Fig. 2 comprises a display 5 which is connected to a local power supply 6. The power supply 6 provides twelve volts and five volts direct current to provide power for

the operation of the display unit 3.

The display unit 3 further comprises a data receiver 7 which is connected via a data bus 8 and a control bus 14 to a micro processor 9, a module ID 10, an EPROM 11, a frequency decoder 12, a RAM 13, and the display 5. The display unit 3 has information stored in the RAM 13 which is addressed by the microprocessor 9 via an address bus 15. Naturally, the unit can include more than one EPROM 11 or RAM 13 if further memory space is required. It is also possible to program the display unit 3 using the microprocessor 9 to thus store further information in the EPROM 11. When the data is received by the display unit 3, the module ID 10 indicates that the correct display unit has been selected via the frequency decoder 12. The data which is received is used to change or alter the program or the information.

The electronic display medium 1 is used to display information (advertising, public notices, news, exchange rates, schedules, current events, etc,) using the electronic display 5. It is possible to update and transfer information to the remotely installed display unit 3 via the telecommunication system. In one embodiment the display of information remains illuminated until updated.

Possible locations for the display units to be installed include public transit, shopping centres, private transit or any other suitable location. The types of authorities which may use the system include government offices, advertising companies, night clubs, or transit authorities or any other interested users.

The display medium 1 is capable of displaying from one character to a complete text worth of information. It can also store within the display units from one character to a complete text of information. Each of the display units 3 can be individually identified so that the information can be routed to one or any number of devices simultaneously, which means that display information pertinent to an individuals preference can be provided. The frequency of the telecommunication system can be modified from the control unit 2 which means that it is possible that there is no operator intervention required. This is of course only one possible requirement.

The system of the display medium 1 also allows for the length of time and the frequency of use of the information being displayed to be altered according to the requirements of the individual user. It is envisaged that the information stored in memory upon a system shut down is not lost due to the power supply 6 located in each of the remote display units 3.

The foregoing describes only one embodiment of the present invention, and modifications obvious to those skilled in the art can be made thereto without departing from the scope of the present invention.

The claims defining the invention are as follows:

1. An electronic diaply medium comprising a central control unit and a plurality of remote display devices, each said remote display device adaptable to display information which is stored in said device according to a pre-programmed instruction, wherein said central control unit provides control signals to alter the program and/or said stored information wherein said signals are passed along a telecommunication system.

2. An electronic display medium as claimed in claim 1, wherein the central control unit includes a primary computer means which provides signals to a secondary computer means which is associated with a transmitter which sends said control signals to receivers associated with said remote display devices.

3. An electronic display medium as claimed in claim 2, wherein said remote display devices include a storage device to store display information, said storage device being accessed by a computer means.

4. An electronic display medium as claimed in claim 3, wherein said computer means in said remote display device is controlled by said signals passed along said telecommunication system.

5. An electronic display medium as claimed in claim 4, wherein said display device is capable of displaying from one character to a complete text of information, and said display device is individually identified, whereby said control signals control one or more display devices at the one time.

6. An electronic display medium substantially as described with reference to the accompanying drawings.

DATED this TWENTY FOURTH day of JANUARY 1990

Michael Leearle Yokom
Stephen John Lomans

Patent Attorneys for the Applicants
SPRUSON & FERGUSON

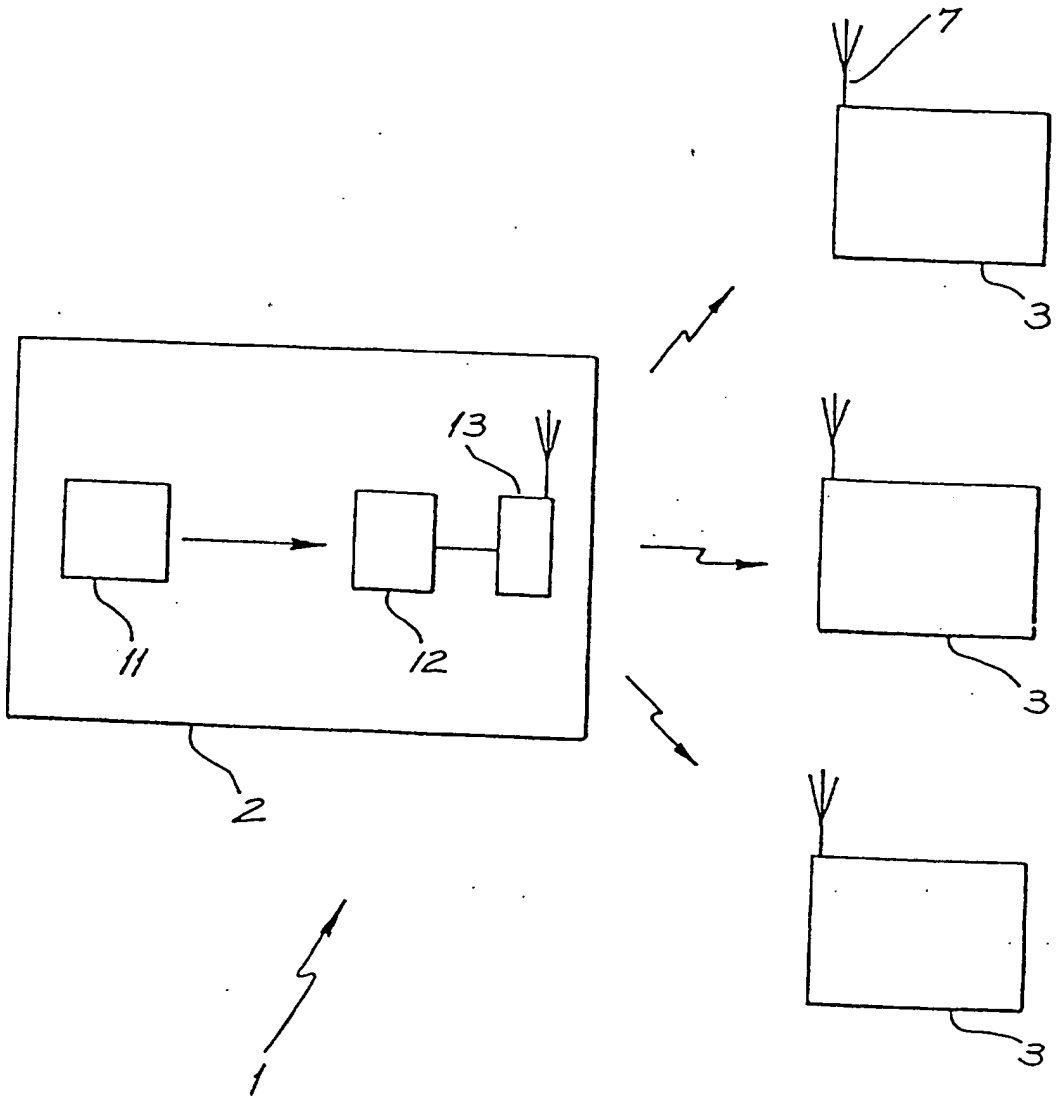
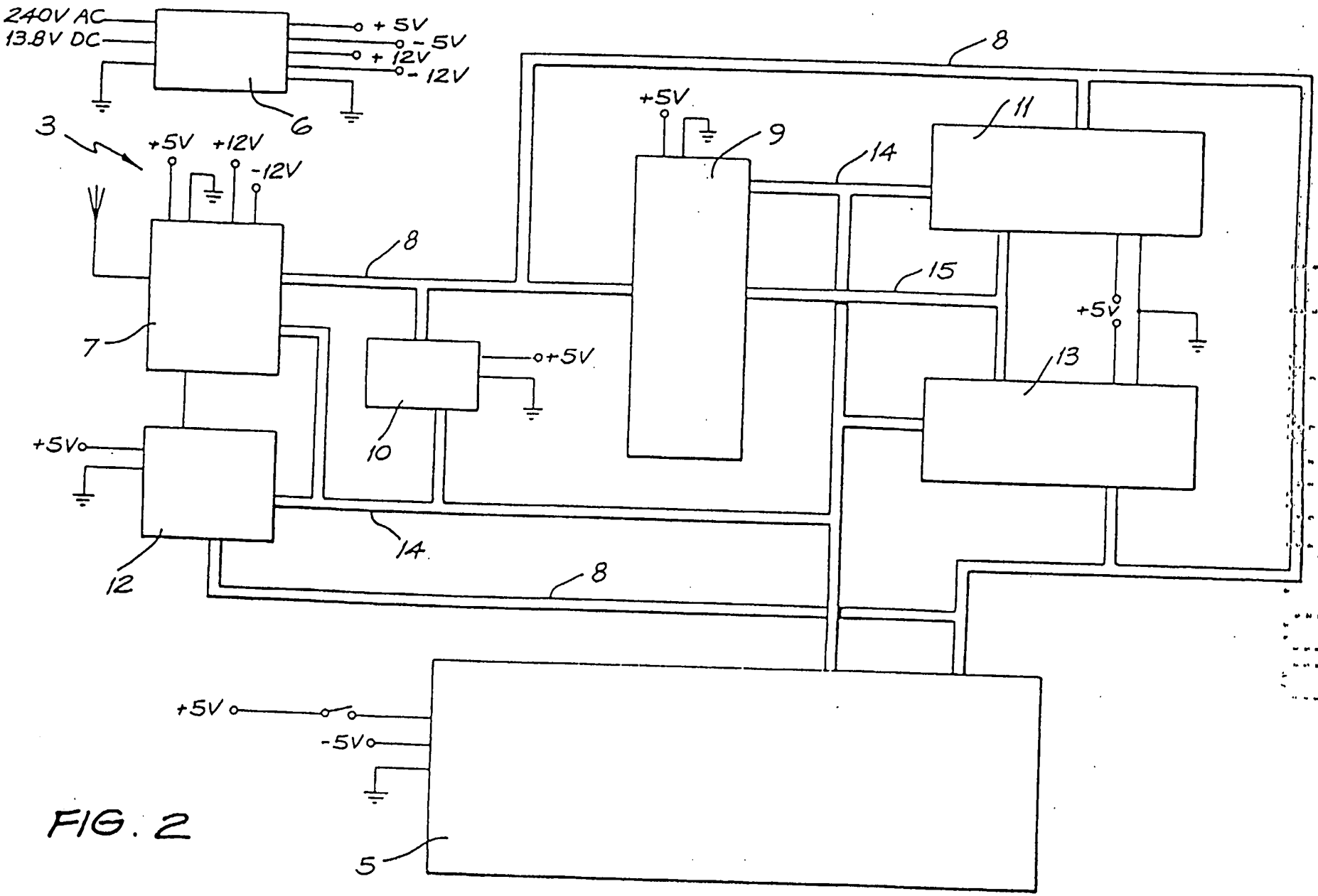


FIG. 1


240V AC
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+5V
-5V
+12V
-12V
6
3
+5V
+12V
-12V
8
+5V
9
14
11
15
+5V
7
+5V
10
13
+5V
14
12
8
+5V
-5V
5

FIG. 2